

WHAT IS CLAIMED IS:

1. A communication apparatus comprising:

receiving means for receiving operation data obtained by each user for dynamic data played back by a playback apparatus;

storage means for storing the operation data received by said receiving means;

digest-information generating means for generating digest information of the dynamic data according to the operation data stored in said storage means; and

transmission means for transmitting the digest information generated by said digest-information generating means to at least one of the playback apparatuses.

2. A communication apparatus according to claim 1, wherein said receiving means receives the operation data indicating at least one of instructions to fast-forward, rewind, and pause the dynamic data played back by the playback apparatus.

3. A communication apparatus according to claim 1, wherein:

said receiving means receives playback-portion identification information indicating a playback portion of

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the dynamic data played back by the playback apparatus; and
said digest-information generating means comprises
statistical processing means for accumulating playback times
of the playback portion based on the playback-portion
identification information received by said receiving means,
and generates the digest information based on an
accumulation result obtained by said statistical processing
means.

4. A communication apparatus according to claim 3,
wherein said digest-information generating means generates
the digest information from the playback portion whose
accumulated playback times indicate a predetermined
threshold or greater.

5. A communication apparatus according to claim 3,
wherein said digest-information generating means generates
the digest information from the portions other than the
playback portion whose accumulated playback times indicate a
predetermined threshold or smaller.

6. A communication apparatus according to claim 3,
wherein said receiving means receives, together with the
operation data, at least one of title information, playback
time information, and user attribute information of the

dynamic data played back by the playback apparatus.

7. A communication apparatus according to claim 6,
wherein:

said storage means stores the operation data of a
plurality of users corresponding to the title information;

said statistical processing means accumulates the
playback times of the playback portion according to the
title information based on the operation data of the
plurality of users;

said digest-information generating means generates the
digest information based on the accumulation result; and

said transmission means transmits the digest
information to the playback apparatus for playing back the
title information.

8. A communication apparatus according to claim 7,
wherein the user attribute information includes at least one
type of the age, the gender, and the life-style, and said
digest-information generating means generates the digest
information according to the type of the user attribute
information.

9. A communication apparatus according to claim 1,
wherein said receiving means receives as the operation data

time-space position data designating a time-space position of the dynamic data played back by the playback apparatus.

10. A communication apparatus according to claim 9, wherein:

said storage means stores a plurality of the dynamic data; and

said transmission means encodes the dynamic data and transmits the encoded dynamic data to the playback apparatus in response to a request from the user, in which said transmission means encodes a target area designated by the time-space position data at a first resolution level, and encodes areas other than the target area at a second resolution level which is lower than the first resolution level.

11. A communication apparatus according to claim 1, wherein:

said transmission means transmits predetermined dynamic data to the playback apparatus in response to a request from the user:

said receiving means receives the operation data obtained by each user for the dynamic data transmitted by said transmission means;

said digest-information generating means generates the

digest information of the dynamic data according to the operation data; and

said transmission means transmits the generated digest information to the corresponding playback apparatus in response to a request from the user.

12. A communication apparatus according to claim 11, wherein said transmission means comprises broadcast means for broadcasting the dynamic data to the playback apparatuses of unspecified users.

13. A communication apparatus according to claim 11, wherein said receiving means receives as the operation data time-space position data designating a time-space position of the dynamic data transmitted by said transmission means and played back by the playback apparatus.

14. A communication apparatus according to claim 13, wherein said transmission means encodes the dynamic data and transmits the encoded dynamic data to the playback apparatus in response to a request from the user, in which said transmission means encodes a target area designated by the time-space position data at a first resolution level, and encodes areas other than the target area at a second resolution level which is lower than the first resolution

level, and transmits the encoded dynamic data.

15. A communication apparatus according to claim 14, wherein said digest-information generating means comprises statistical processing means for accumulating designation times of each of the time-space positions based on the time-space position data of the identical dynamic data received from a plurality of users by said receiving means, and generates the digest information based on an accumulation result obtained by said statistical processing means.

16. A communication apparatus according to claim 15, wherein said digest-information generating means dynamically sorts the accumulation results of scenes designated by the time-space position data obtained by said statistical processing means in descending numeric order, and extracts a predetermined number of scenes having a greater number of the accumulated designation times according to a sorting result, thereby dynamically generating the digest information.

17. A communication apparatus according to claim 16, wherein:

said transmission means comprises broadcast means for broadcasting the dynamic data to the playback apparatuses of

unspecified users;

when said receiving means receives request information to send the digest information from the playback apparatus while the dynamic data is being broadcast, said digest-information generating means generates the digest information during a period from when the dynamic data is started until when the digest information is transmitted; and

said transmission means transmits the digest information to the playback apparatus.

18. A communication apparatus according to claim 16, wherein:

when said receiving means receives request information to send the digest information from a specific playback apparatus, said digest-information generating means compares the digest information generated based on the sorting result with the scenes designated by the time-space position data of the user of the specific playback apparatus, and preferentially selects the scenes unique to the time-space position data of the user, thereby generating new digest information for the user.

19. A communication apparatus according to claim 1, wherein said transmission means transmits the digest

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information to the playback apparatus of the user, and also transmits accounting information including payment information for billing the user to an external settlement center.

20. A communication apparatus comprising:
playback means for playing back dynamic data;
input means for inputting as input data user favorite data for the dynamic data played back by said playback means;
transmission means for transmitting the input data input by said input means to an external communication apparatus; and
receiving means for receiving digest information of the dynamic data transmitted from said external communication apparatus.

21. A communication apparatus according to claim 20, wherein said input means outputs the input data indicating at least one of instructions to fast-forward, rewind, and pause the dynamic data played back by said playback means.

22. A communication apparatus according to claim 20, wherein said transmission means transmits playback-portion identification information indicating a playback portion of

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the dynamic data played back by said playback means.

23. A communication apparatus according to claim 22, wherein said transmission means transmits, together with the input data, at least one of title information, playback time information, and user attribute information of the dynamic data played back by said playback means.

24. A communication apparatus according to claim 20, wherein:

said input means outputs as the input data time-space position data designating a time-space position of the dynamic data played back by said playback means; and

said transmission means transmits the time-space position data.

25. A communication apparatus according to claim 20, wherein:

said transmission means transmits request information to send predetermined dynamic data to said external communication apparatus;

said receiving means receives the dynamic data transmitted from said external communication apparatus in response to the request information; and

said playback means plays back the received dynamic

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data.

26. A communication apparatus according to claim 25, wherein said receiving means comprises broadcast receiving means for receiving the dynamic data to be broadcast to said playback means of unspecified users.

27. A communication apparatus according to claim 25, wherein said transmission means transmits as the input data time-space position data designating a time-space position of the dynamic data received by said receiving means and played back by said playback means.

28. A communication apparatus according to claim 26, wherein said transmission means transmits the request information to send the digest information during a period from the start of the dynamic data until a current time while the dynamic data is being played back by said playback means.

29. A communication apparatus comprising:
receiving means for receiving dynamic data from an external source;
playback means for playing back the dynamic data received by said receiving means;

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input means for inputting as input data user favorite data for the dynamic data played back by said playback means;

digest-information generating means for generating digest information based on the input data input by said input means; and

transmission means for transmitting the digest information generated by said digest-information generating means to a portable terminal.

30. A communication apparatus according to claim 29, wherein said input means outputs input data indicating at least one of instructions to fast-forward, rewind, and pause the dynamic data played back by said playback means.

31. A communication apparatus according to claim 29, wherein:

said input means outputs as the input data playback-portion identification information indicating a playback portion of the dynamic data played back by said playback means; and

said digest-information generating means comprises statistical processing means for accumulating playback times of the playback portion based on the playback-portion identification information, and generates the digest

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information based on an accumulation result obtained by said statistical processing means.

32. A communication apparatus according to claim 31, wherein said digest-information generating means generates the digest information from the playback portion whose accumulated playback times indicate a predetermined threshold or greater.

33. A communication apparatus according to claim 31, wherein said digest-information generating means generates the digest information from portions other than the playback portion whose accumulated playback times indicate a predetermined threshold or smaller.

34. A communication apparatus according to claim 31, wherein said input means outputs as the input data at least one of title information, playback time information, and user attribute information of the dynamic data played back by said playback means.

35. A communication apparatus according to claim 34, further comprising storage means for storing the operation data of a plurality of users corresponding to the title information, wherein:

said statistical processing means accumulates the playback times of each of the playback portions according to the title information based on the operation data of the plurality of users; and

said digest-information generating means generates the digest information based on the accumulation result.

36. A communication apparatus according to claim 35, wherein the user attribute information includes at least one type of the age, the gender, and the life-style, and said digest-information generating means generates the digest information according to the type of the user attribute information.

37. A communication apparatus according to claim 29, wherein said input means outputs as the input data time-space position data designating a time-space position of the dynamic data played back said playback means.

38. A communication apparatus according to claim 29, wherein:

said transmission means transmits request information to send predetermined dynamic data to an external communication apparatus;

said receiving means receives the dynamic data

transmitted from said external communication apparatus in response to the request information; and

said digest-information generating means generates the digest information of the dynamic data.

39. A communication apparatus according to claim 29, wherein said receiving means comprises broadcast receiving means for receiving the dynamic data to be broadcast to said playback means of unspecified users.

40. A communication apparatus according to claim 39, wherein said input means outputs as the input data time-space position data designating a time-space position of the dynamic data received by said broadcast receiving means and played back by said playback means.

41. A communication apparatus according to claim 40, wherein said digest-information generating means comprises statistical processing means for accumulating designation times of each of the time-space positions based on the time-space position data of the identical dynamic data input by said input means, and generates the digest information based on an accumulation result obtained by said statistical processing means.

42. A communication apparatus according to claim 41, wherein said digest-information generating means dynamically sorts the accumulation results of scenes designated by the time-space position data obtained by said statistical processing means in descending numeric order, and extracts a predetermined number of scenes having a greater number of the accumulated designation times according to a sorting result, thereby dynamically generating the digest information.

43. A communication apparatus according to claim 42, wherein, when said input means outputs request information to send the digest information from said playback means while the dynamic data is being broadcast, said digest-information generating means generates the digest information during a period from when the dynamic data is started until when the digest information is transmitted.

44. A communication apparatus according to claim 42, wherein, when said input means outputs request information to send the digest information from a specific user, said digest-information generating means compares the digest information generated based on the sorting result with the scenes designated by the time-space position data of the specific user, and preferentially selects the scenes unique

to the time-space position data of the specific user, thereby generating new digest information for the specific user.

45. A communication apparatus according to claim 29, wherein said transmission means preferentially transmits the digest information to said portable terminal according to the level of priority or the level of urgency of the digest information.

46. A communication apparatus according to claim 29, wherein said digest-information generating means generates the digest information in a hierarchical structure consisting of layers having different sizes of the digest information, in which a lower layer of the hierarchical structure has a greater size of the digest information, and a higher layer of the hierarchical structure has a smaller size of the digest information.

47. A communication apparatus according to claim 46, wherein said digest-information generating means selectively transmits the digest information of the individual levels of the hierarchical structure according to a traffic of a communication channel between said communication apparatus and said portable terminal.

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48. A communication apparatus according to claim 29, wherein said playback means comprises display means for displaying moving picture data, which serves as the dynamic data or the digest information.

49. A communication method comprising the steps of:
receiving operation data obtained by each user for dynamic data played back by a playback apparatus;
generating digest information of the dynamic data according to the received operation data; and
transmitting the generated digest information to at least one of the playback apparatuses.

50. A communication method comprising the steps of:
playing back dynamic data;
inputting as input data user favorite data for the played back dynamic data;
transmitting the input data to an external communication apparatus; and
receiving digest information of the dynamic data transmitted from said external communication apparatus.

51. A communication method comprising:
receiving dynamic data from an external source;

52. A storage medium for storing a program implementing a communication method, said communication method comprising the steps of:

generating digest information of the dynamic data according to the received operation data; and

53. A storage medium for storing a program implementing a communication method, said communication method comprising the steps of:

playing back dynamic data;

inputting as input data user favorite data for the
played back dynamic data;

transmitting the input data to an external

communication apparatus; and

receiving digest information of the dynamic data
transmitted from said external communication apparatus.

54. A storage medium for storing a program
implementing a communication method, said communication
method comprising the steps of:

receiving dynamic data from an external source;

playing back the received dynamic data;

inputting as input data user favorite data for the
played back dynamic data;

generating digest information based on the input data;

and

transmitting the generated digest information to a
portable terminal.

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